

***DERAEOCORIS FLAVILINEA* (A. COSTA)
(HEMIPTERA: MIRIDAE), NEW TO BRITAIN**

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Abstract. *Deraeocoris flavilinea* (A. Costa) (Hemiptera: Miridae) is newly described from Britain and characters given for its recognition.

INTRODUCTION

Four species of *Deraeocoris* are known from Britain (Southwood & Leston, 1959), two of which are common, *D. lutescens* (Schilling) and *D. ruber* (L.), one local, *D. scutellaris* (Fab.), and one rare, *D. olivaceus* (Fab.). On 13.vii.1996, very early in my bug-collecting days, I collected a single specimen of a bug which I was later to discover was *Deraeocoris flavilinea* (A. Costa), apparently new to Britain.

I first collected the bug whilst beating a bush of elder, *Sambucus nigra*, at the Middlesex Filter Beds Nature Reserve in the Lee Valley Regional Park, London (TQ358866). The filter beds are situated by the River Lea, which is a major tributary of the Thames, and are about 7 kilometres up river at the northern end of Hackney Marshes.

During the winter of 1996/97 I took this specimen, along with many others, to Roger Hawkins who had kindly agreed to verify my identifications and assist me with those to which I was unable to put a name. Using Wagner & Weber (1964) this specimen was named as *D. flavilinea*; it also matched photographs taken by Dr B. S. Nau of Dutch specimens sent to him by Dr B. Aukema. The identification was confirmed by Dr Nau (to whom I then sent the specimen) by comparing it with these Dutch specimens.

I searched for *D. flavilinea* only briefly in 1997 but found more specimens in 1998, not on elder but on sycamore, *Acer pseudoplatanus*. On 4.vi.1998 I discovered fourteen individuals by beating the lower branches of a sycamore tree at the East India Dock (TQ391808), a site near the confluence of the rivers Lea and Thames. Twelve were adults and two were fourth-instar nymphs. I swept another individual from the herbage near the tree. The undersides of many of the leaves on the tree were covered with green aphids, a possible food source. I found a further two adults at the Middlesex Filter Beds on 27.vi.1998 and five more on 28.vi.1998, all on sycamore. It seemed to me that there were two colour forms and I took one of each.

An indication of its recent rapid expansion in range is the brief treatment given to it in Wagner & Weber (1964), reflecting the absence of records from France at the time. It was then apparently known only from Italy. More recently (1985) it has arrived in Holland in the Arnhem, Nijmegen and Wageningen areas, where it has been recorded from sycamore and field maple *Acer campestre* (Aukema, 1989). It is also now recorded from Switzerland, Germany, Luxembourg, Belgium, Malta, Slovenia and Azerbaijan (Aukema & Rieger, 1999).

DESCRIPTION

There is some variation in the coloration of *D. flavilinea*. This was apparent in the field and is marked in my set specimens. There seem to be a 'light' and a 'dark' form.

Head:	light form:	slight orange markings on an olive/grey background
	dark form:	orange markings over a blackish background, posterior surface black.
Pronotal ring:	light form:	pale with a dark line on the posterior edge.
	dark form:	dull orange/olive with black anterior and posterior edges, also black by the eyes.
Pronotum:	light form:	olive/orange with two conspicuous black markings near the anterior edge, puncturation black.
	dark form:	black except for a suffusion of olive/orange in the posterior corners.
Scutellum:	light form:	dark anteriorly in the middle, this petering out to dark puncturation only towards the apex, sides pale.
	dark form:	dark with lightish orange sides.
Clavus:	light form:	glossy, light olivaceous.
	dark form:	glossy olive/orange with dark puncturation.
Corium:	light form:	pale with dark puncturation, appearing darker along the claval edge. Distal edge (as far as cuneus) and tip of embolium dark.
	dark form:	dark olive, the embolium olive/orange but darker towards the rear.
Cuneus:	light form:	orange with a dark apex. The hyaline area of the wing is dusky with dark venation.
	dark form:	cuneus a deep orange/red with a thick, dark apex, with the inner corner also dark. The hyaline area is similar to the light form.
Antennae:	light form:	segment one orange/red with a dark apex, segment two orange with the distal third dark. Segment three with an orange base and then brown as is the fourth segment.
	dark form:	segments dark throughout. Only the junction of the third and fourth segments is paler.
Femora:	light form:	orange, reddish towards their apices with a few small dark markings.
	dark form:	dark.
Tibiae:	light form:	three reddish/orange dark bands and two pale bands.
	dark form:	fore and middle tibiae with three dark and three paler olive/orange bands, as the proximal ends are pale for a short distance; hind tibiae have a dark proximal end and so have only two paler bands.
Tarsi:	light and dark forms:	mainly dark.

IDENTIFICATION

D. flavilinea can be separated from other species of *Deraeocoris* in Britain by the following notes. It is a medium-sized species indicated as being less than 9 mm long

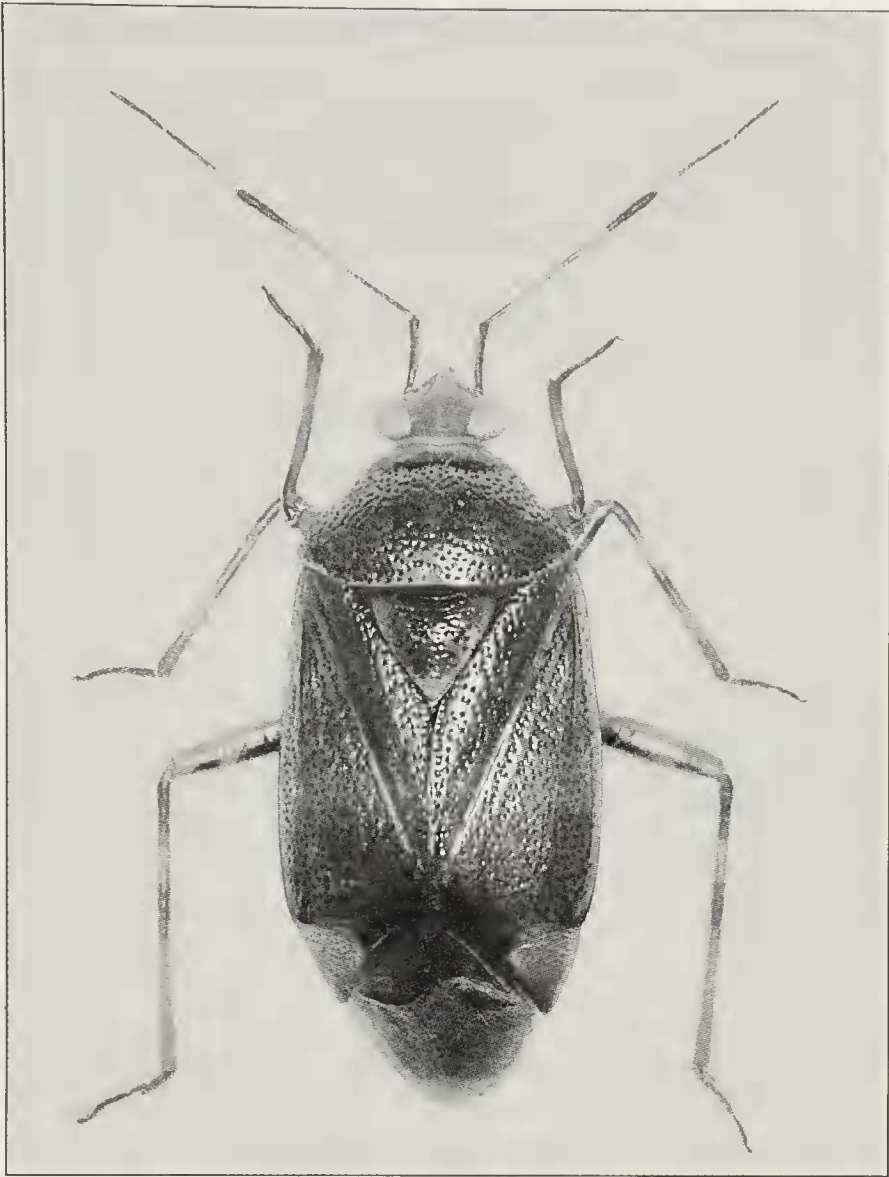


Fig. 1. *Deraeocoris flavilinea*. Photo B. Nau.

by Wagner & Weber. My two specimens are 7.2 mm (male) and 7.6 mm (female) long. This immediately separates it from *D. lutescens* which is a small species from 3.8 mm to 4.6 mm long (my two specimens are 4.2 mm (male) and 4.5 mm (female) long). This puts *D. flavilinea* in the size range of *D. ruber* and *D. scutellaris* and with possible overlap with small specimens of *D. olivaceus*.

It can be separated from *D. ruber* and *D. scutellaris* by the presence of three dark and two pale rings on the tibiae, a characteristic shared with *D. olivaceus*. In my specimens there is sometimes a partial third pale ring at the proximal end of the tibiae. The colour of the antennae is variable (see below).

Apart from being generally smaller in size it can be separated from *D. olivaceus* by the colour of the stink gland opening. In *D. olivaceus* the margin of the opening is dark (matt black in two specimens lent to me by Roger Hawkins) whereas in *D. flavilinea* it is whitish or yellowish. My two specimens differ. In the light form it is very pale and in the dark form it is distinctly darker, being olivaceous with an orange tint.

To take account of this species the Southwood & Leston key (page 205) needs to be modified at couplet 2.

2. Tibiae with 3 dark and 2(-3) pale rings. Scutellum punctate. 3
Tibiae without 3 dark and 2 pale rings. Scutellum without puncturation. 4
3. 8.5–10 mm; margin of stink gland opening dark. *olivaceus*
7–9 mm; margin of stink gland opening pale, may be darker but not almost black as in *olivaceus* *flavilinea*
4. as per couplet 3 in Southwood & Leston (1959).

ACKNOWLEDGMENTS

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SHORT COMMUNICATION

Records of *Phyllonorycter leucographella* (Zell.) (Lep: Gracillariidae), *Aethes beatricella* (Wals.) and *Cydia fagiglandana* (Zell.) (Lep.: Tortricidae) in S. Wales — Since *P. leucographella* was first found in the UK it has rapidly increased its distribution. On 7.i.2000 leaf mines were first noticed on *Pyracantha* leaves in suburban Cardiff [ST192783] and subsequently the mined leaves were noticed by David Slade in several places in central Cardiff. This may be the first record of the species in Wales. A further leaf mine was found by Mark Evans at Cwmbach, Aberdare [SO028018]. To date this is the only record away from the Cardiff area for *P. leucographella*. The species does not yet appear to have spread further west in Wales, despite careful searching by members of the Glamorgan Moth Group and similar groups in Carmarthenshire and Pembrokeshire.

Two other species new for Glamorgan (vc41) in 2000 were; *Aethes beatricella* (Wals.) (Lepidoptera: Tortricidae) found at actinic light on 1 July on Flat Holm Island [ST2264] by Gorden Avery. This species is also found on nearby Steep Holm Island and Brean Down in North Somerset. *Cydia fagiglandana* (Zell.) (Lepidoptera: Tortricidae) one specimen to my light at Llantrisant Forest [ST022846] 17.vii.2000 by Stefan Golaszewski & Mike Powell.

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